

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P261023

Luminaire Tested: **24CZ-LD5-30SE-S-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261023  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-30SE-S-UNV-L83050-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3094.0 lumens  
Efficiency: N/A  
Efficacy: 142.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

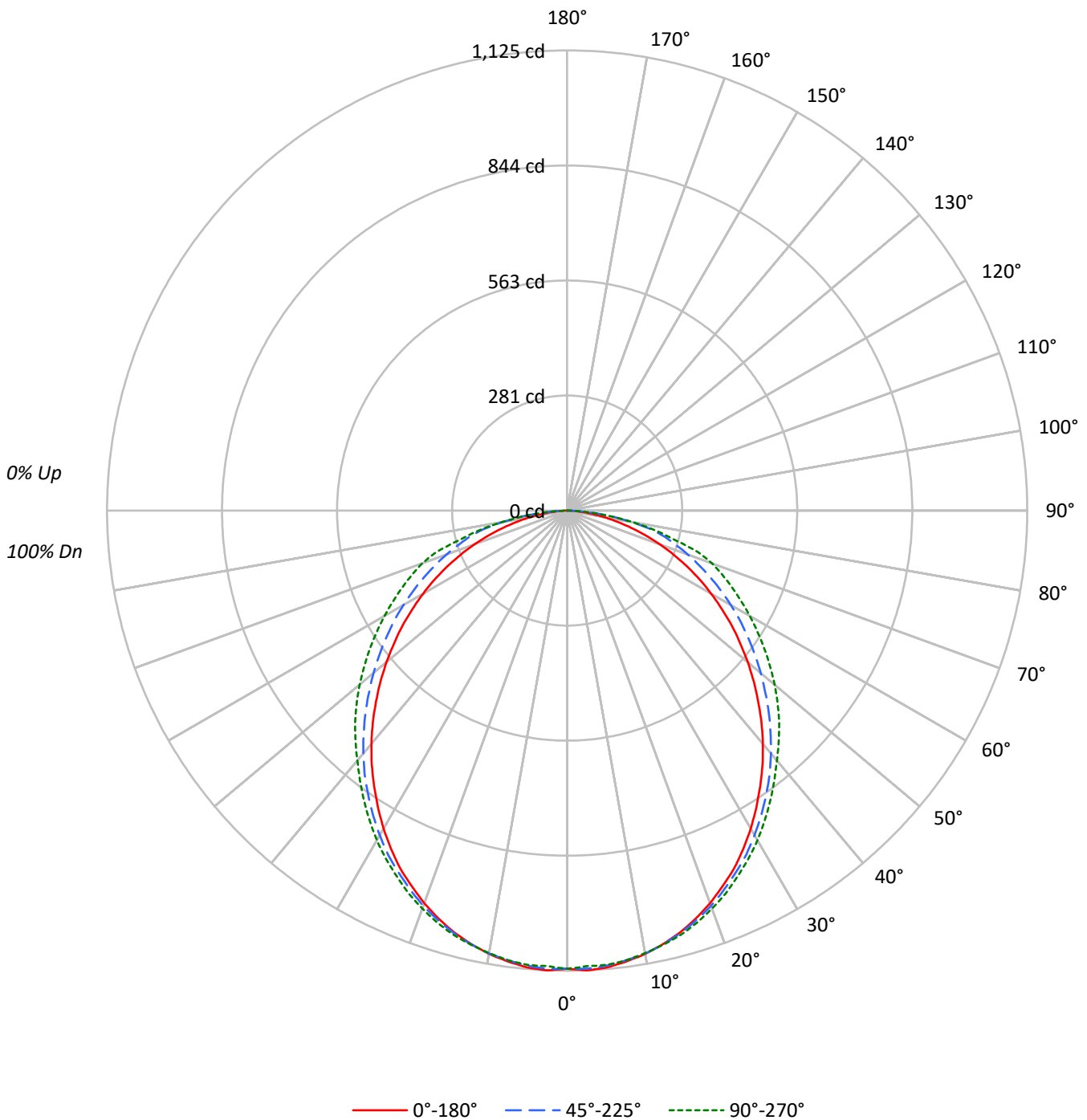
Input Watts (W): 21.762  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1507	1507	1507
5°	1514	1509	1506
10°	1504	1502	1501
15°	1487	1490	1496
20°	1462	1473	1483
25°	1434	1449	1464
30°	1395	1423	1446
35°	1351	1393	1422
40°	1307	1362	1401
45°	1258	1326	1395
50°	1207	1293	1386
55°	1154	1266	1381
60°	1094	1244	1388
65°	1029	1229	1416
70°	948	1235	1482
75°	840	1279	1381
80°	702	1213	1244
85°	525	969	891



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.9	3.4
10°-20°	301.2	9.7
20°-30°	448.8	14.5
30°-40°	528.4	17.1
40°-50°	536.9	17.4
50°-60°	482.7	15.6
60°-70°	381.4	12.3
70°-80°	241.9	7.8
80°-90°	66.8	2.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	855.9	27.7
0°-40°	1384.3	44.7
0°-60°	2403.9	77.7
0°-90°	3094.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3094.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1120	1120	1120	1120	1120	
5°	1121	1112	1117	1115	1115	106
15°	1068	1062	1070	1073	1074	301
25°	966	965	976	982	986	444
35°	823	828	848	858	866	515
45°	661	670	697	718	733	510
55°	492	504	540	574	589	439
65°	323	340	386	428	445	320
75°	162	189	246	268	266	172
85°	34	59	63	58	58	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1120.1	1120.1	1120.1	1120.1	1120.1
2.5°	1125.2	1117.0	1121.1	1119.1	1114.9
5°	1121.1	1111.8	1117.0	1114.9	1114.9
7.5°	1111.8	1104.6	1108.8	1107.7	1108.8
10°	1100.5	1093.3	1099.5	1099.5	1098.5
12.5°	1085.1	1078.9	1086.1	1086.1	1087.1
15°	1067.6	1062.4	1069.6	1072.7	1073.8
17.5°	1046.0	1040.8	1050.1	1053.2	1056.3
20°	1021.3	1019.2	1028.5	1031.5	1035.7
22.5°	993.5	993.5	1002.7	1006.8	1013.0
25°	965.7	964.6	976.0	982.1	986.3
27.5°	932.7	933.7	948.2	954.3	959.5
30°	897.7	899.8	916.2	923.5	930.7
32.5°	860.7	864.8	883.3	891.5	898.7
35°	822.6	827.7	848.3	857.6	865.8
37.5°	784.5	791.7	813.3	822.6	831.8
40°	744.3	750.5	775.2	786.5	797.9
42.5°	703.1	711.4	736.1	752.6	765.9
45°	660.9	670.2	697.0	717.6	733.0
47.5°	618.7	631.1	656.8	684.6	698.0
50°	576.5	588.9	617.7	648.6	662.0
52.5°	533.3	545.6	578.6	610.5	624.9
55°	492.1	504.5	539.5	574.5	588.9
57.5°	448.9	462.2	501.4	537.4	551.8
60°	406.6	420.0	462.2	500.3	515.8
62.5°	365.5	379.9	424.1	464.3	479.7
65°	323.3	339.7	386.1	428.3	444.7
67.5°	282.1	300.6	349.0	393.3	410.8
70°	240.9	262.5	314.0	359.3	376.8
72.5°	200.8	224.4	279.0	324.3	333.6
75°	161.6	189.4	246.0	267.7	265.6
77.5°	124.6	155.5	209.0	213.1	219.3
80°	90.6	124.6	156.5	164.7	160.6
82.5°	59.7	93.7	112.2	108.1	107.1
85°	34.0	58.7	62.8	57.7	57.7
87.5°	14.4	23.7	20.6	15.4	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)